

REMARKS

I. Introduction

Claim 29 has been canceled. Claims 1, 2, 6, 13, 17, 19, 21, 23, 26, 30 and 33 have been amended. Accordingly, claims 1-28, and 30-33 are now pending.

Independent claim 1 has been amended to include features from original claim 6. Independent claim 13 has been amended to include features from original claim 17. Independent claim 19 has been amended to include features from original claim 21. Independent claim 26 has been amended to include features from original claim 29 and Independent claim 30 has been amended to include features found in original claim 33.

Claims 1, 13 and 26 have been amended to remove the parenthesis found in these claims thereby overcoming the Examiner's objections to these claims.

In the Office Action, the Examiner rejected all of the pending claims based on prior art for the reasons set forth in the Office Action. In making the prior art rejections the Examiner used U.S. Patent No. 6,078,582 to Curry et al.; U.S. Patent No. 6,389,115 to Swistock; and U.S. Patent No. 6,389,276 to Brilla et al.

As will be discussed below, as amended, none of the pending claims are anticipated or rendered obvious by the prior art of record.

II. Summary of the Invention

The present invention is directed to methods and apparatus for providing improved voice mail services through the monitoring of SMDI messages, e.g., messages communicated on a link between a telephone switch and a voice mail system. Detected SMDI messages are used in combination with IP, e.g., E-mail based, forwarding of SMDI message information to enable such features as automatic voice mail retrieval and forwarding. The system of the present invention is designed so that it can be used with advanced intelligent network (AIN) services, e.g., voice mail services, implemented under control of an AIN service control point. In such implementations, the AIN service control point stores call processing records (CPR) corresponding to different voice mail service subscribers and includes in at least some CPRs, information such as an E-mail address and/or voice mail retrieval system information to be used in conveying SMDI message information. By storing E-mail and voice message retrieval information in a subscriber's CPR at a service control point management of E-mail address information can be centralized with service information relating to other AIN telephone services making management of such information easier than if it was stored in other locations. **As will be discussed**

below, the applied references do not teach, disclose, or suggest the use of an SCP including call processing records having the information recited in various claims.

Various features of the present invention use, in addition to SMDI message waiting indicator (MSI) control messages, **SMDI history message information**. As discussed in the application SMDI call history messages include among other things, **calling party information** such as the calling party's directory number which is not available from a SMDI MWI control message which is used to activate/deactivate a message waiting indicator on a telephone corresponding to a party for which a message is left. In accordance with various features of the present invention, SMDI history message information is stored for later use and/or used to generate messages used to provide information on voice message related events. In some cases, an IP message, e.g., an E-mail message, generated in accordance with the invention includes information from both a SMDI history message and a SMDI MWI control message. **The applied references do not discuss SMDI history messages let alone storing history message information or combining such information with MWI control message information to generate an IP, e.g., E-mail, message including information from both types of messages.**

Various features of the present invention are directed to a voice mail retrieval and forwarding system which accesses and then, e.g., forwards via E-mail, a

stored voice message in response to receiving SMDI message information. The applied references do not teach, disclose or suggest such a retrieval and forwarding system.

III. The Pending Claims, As Amended, Are Patentable

1. Claims 1-12 and 26-28 Are Patentable

The prior art references applied by the Examiner do not discuss or disclose SMDI history messages, let along performing various operations in response to detecting such messages such as storing SMDI history message information or retrieving stored history message information. Accordingly, claims 1-12 and 26-28 as amended are patentable.

Representative claim 1 has been amended to include features previously found in dependent claim 6 and now explicitly refers to "storing at least some information included in the SMDI history message" in response to "detecting a SMDI history message".

Claim 1, as amended, recites:

A communications method, comprising:

monitoring SMDI communications link extending between a telephone switch and a voice messaging system to detect a SMDI message;

generating an IP message including at least one IP packet, said IP packet including at least some information obtained from a detected SMDI message; and

transmitting the IP message over a communications channel which supports the transmission of IP packets; and
in response to detecting a SMDI history message, storing at least some information included in the SMDI history message.

In rejecting claim 6, the Examiner previously stated:

Regarding claim 6, Curry discloses in response to detecting a SMDI history message, storing at least some information included in the SMDI history message (column 14, lines 19-27). (Office Action page 3)

Column 14, lines 19-29 of the Curry et al. patent states:

As shown in Fig. 7, the telephony platform 100 of the ITS 72 includes a simplified message desk interface (SMDI) 104 that sends and receives signaling data to the CCS signaling network, a digital switch 106 that sends and receives communication traffic from the trunk line 68, a master control unit (MCU) 108 that controls the overall operations of the ITS 72, including controlling the switch 106 to separate data traffic on the trunk line 68 into single 64 Kb/s data channels 110. The data on each of the data channels 110 is compressed by a voice processor unit (VPU) 112 into compressed communication data having a data rate of approximately 16 Kbits/s or lower.

The above portion of the Curry et al. patent cited by the Examiner does NOT mention SMDI history messages or storing information.

Later in the office action, in regard to original claim 29, the Examiner states:

Regarding claim 29, Curry discloses the Internet Protocol message generation module includes at least a portion of a routine for accessing a stored history message to obtain calling party name or directory number information (column 14, lines 61-66)

This portion of the Curry et al. patent states:

An exemplary call using the arrangements of FIGS. 6 and 7 will now be described with respect to FIGS 9A and 9B. the system of FIG. 6 establishes an Internet connection to link a calling to a called telephone without the necessity of either party possessing or using personal or office computer equipments. ... (Curry et al. col. 14, lines 61-66)

Applicants respectfully submit that **the cited portions of the Curry et al. patent are devoid of any reference to a SMDI history message or a storing step or using stored SMDI history message information. The other applied references do not make up for this deficiency. Since the Curry et al. patent does not mention a SMDI history message or the use of SMDI history message information as recited in various claims, and the other references do not make up for this deficiency, it is respectfully submitted that claims 1-12 and 26-28 are patentable over the prior art of record.**

2. Claims 13-18 Are Patentable

The prior art of record does not teach, disclose or suggest an AIN SCP including call processing records having the type of information recited in various pending claims or **operating a messaging device to receive Internet Protocol address information and directory information from an AIN Service Control Point.** Accordingly, claim 13-18 are patentable over the prior art of record.

Claim 13, as amended, recites:

A method of operating an Internet Protocol messaging device the method comprising:

receiving Internet Protocol **address information and directory number information for each of a plurality of voice mail service subscribers from an advanced intelligent network service control point coupled to said Internet Protocol messaging device;**

receiving a SMDI message;
generating an IP message including at least one IP packet and at least some information obtained from the received SMDI message; and

transmitting the IP message to an IP communications network.

Claim 13 was amended to include features from original dependent claim 17. In rejecting claim 17, the Examiner stated:

Regarding **claim 17**, Curry discloses prior to receiving the SMDI message, receiving Internet Protocol address information and directory number information for each of a plurality of voice mail service subscribers from a service control point coupled to the Internet Protocol messaging device (column 14, lines 32-47).

A review of column 14, lines 32-47 reveals **NO mention of an an advanced intelligent network service control point** as currently recited in claim 13. Accordingly, **claim 13 and claims 14-18 which depend there from are patentable** since the other applied references also fail to disclose the claimed features.

3. **Claims 19-25 and 30-33 Are Patentable**

Claims 19-25 and 30-33 are patentable because the prior art fails to disclose or suggest a system which retrieves messages in response to an IP message including SMDI information.

Representative claim 19, as amended, recites:

A communications system,
comprising:
 a telephone switch;
 a voice messaging system;
 a communications link coupled
to the telephone switch and to the
voice messaging system for carrying
voice message waiting information
between voice messaging system and the
telephone switch; and

an Internet Protocol message server coupled to said communications link for detecting voice message waiting information transmitted over said communications link and for generating an Internet Protocol message including at least some of said voice message waiting information; and.

a voice message retrieval device coupled to said Internet Protocol message server by an Internet Protocol communications channel, the voice message retrieval device **including means for retrieving a waiting message from said voice messaging system in response to receiving an IP message including at least some message waiting indicator information.**

Claim 19 includes some features previously found in original dependent claim 21.

In rejecting original dependent claim 21 the Examiner stated:

Regarding **claim 21**, Swistock discloses a voice message retrieval device coupled to the Internet Protocol message server by an Internet Protocol communications channel, the voice message retrieval device operating to retrieve a waiting message from the voice messaging system in response to receiving an IP message including operate message waiting indicator information (column 3, lines 11-17). (Office Action page 8).

The cited portion of the Swistock patent states:

Each time a voice mail message is left on the voice mail system 122, the voice mail system 122 generates an industry standard station message desk interface signal (SMDI) which is a DTMF signal that includes information indicating whether a message waiting indicator (MWI), such as the one at the receiving phone, should be turned on or off (MWI ON or MWI OFF) (Swistock patent Col. 3, lines 11-16).

Nothing in the above quoted portion of the Swistock patent, cited by the Examiner, discusses retrieving a message let alone doing so in response to *in response to receiving an IP message* including at least some message waiting indicator information.

Since the other applied references do not make up for this deficiency of the Swistock patent, it is respectfully submitted that claims 19-25 and 30-32 are patentable over the prior art of record.

IV. Conclusion

Claims 1-28 and 30-33 are pending. None of the claims are anticipated or rendered obvious by the prior art of record. Accordingly, the application is now in condition for allowance.

If there are any outstanding issues that need to be resolved to place the application in condition for